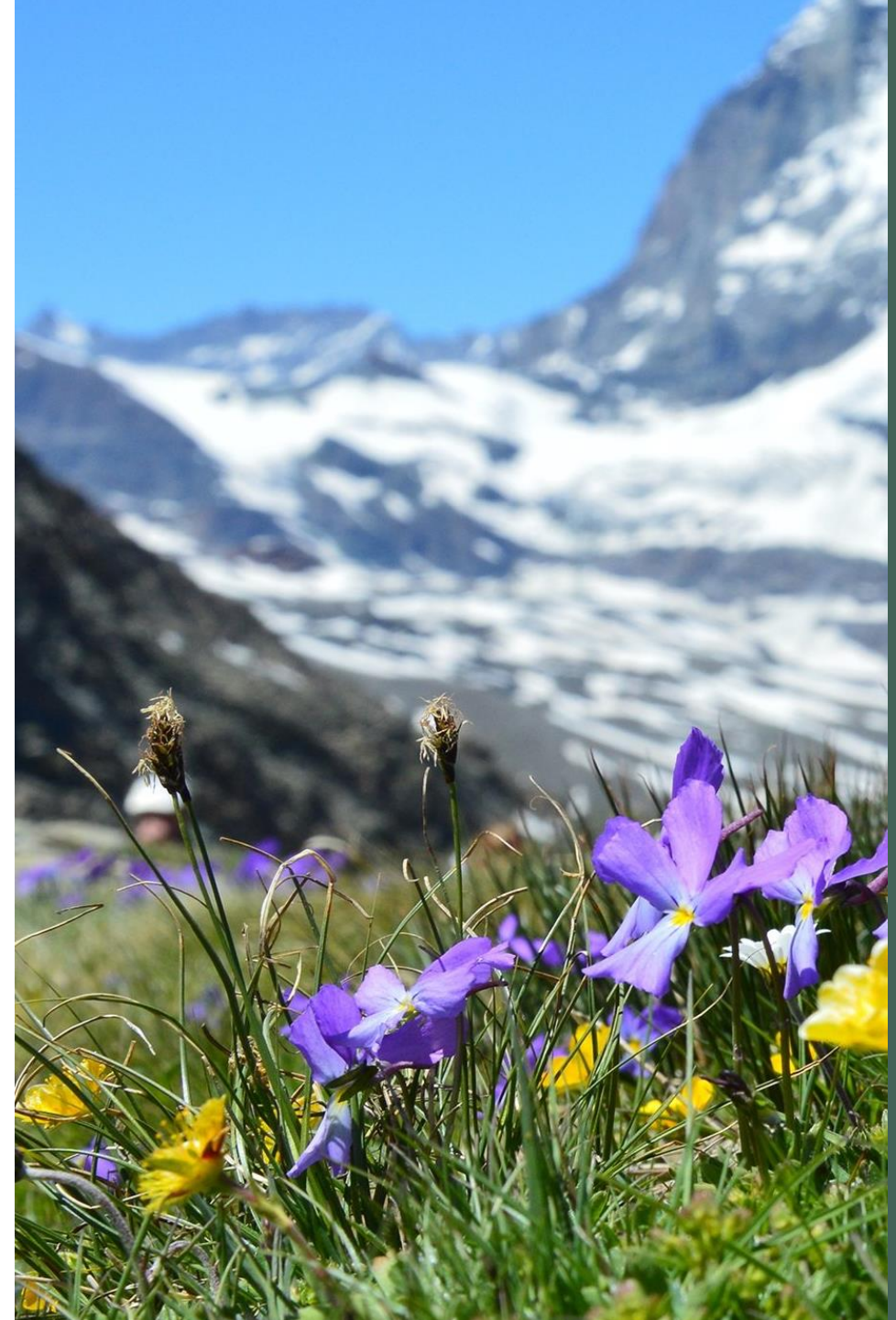


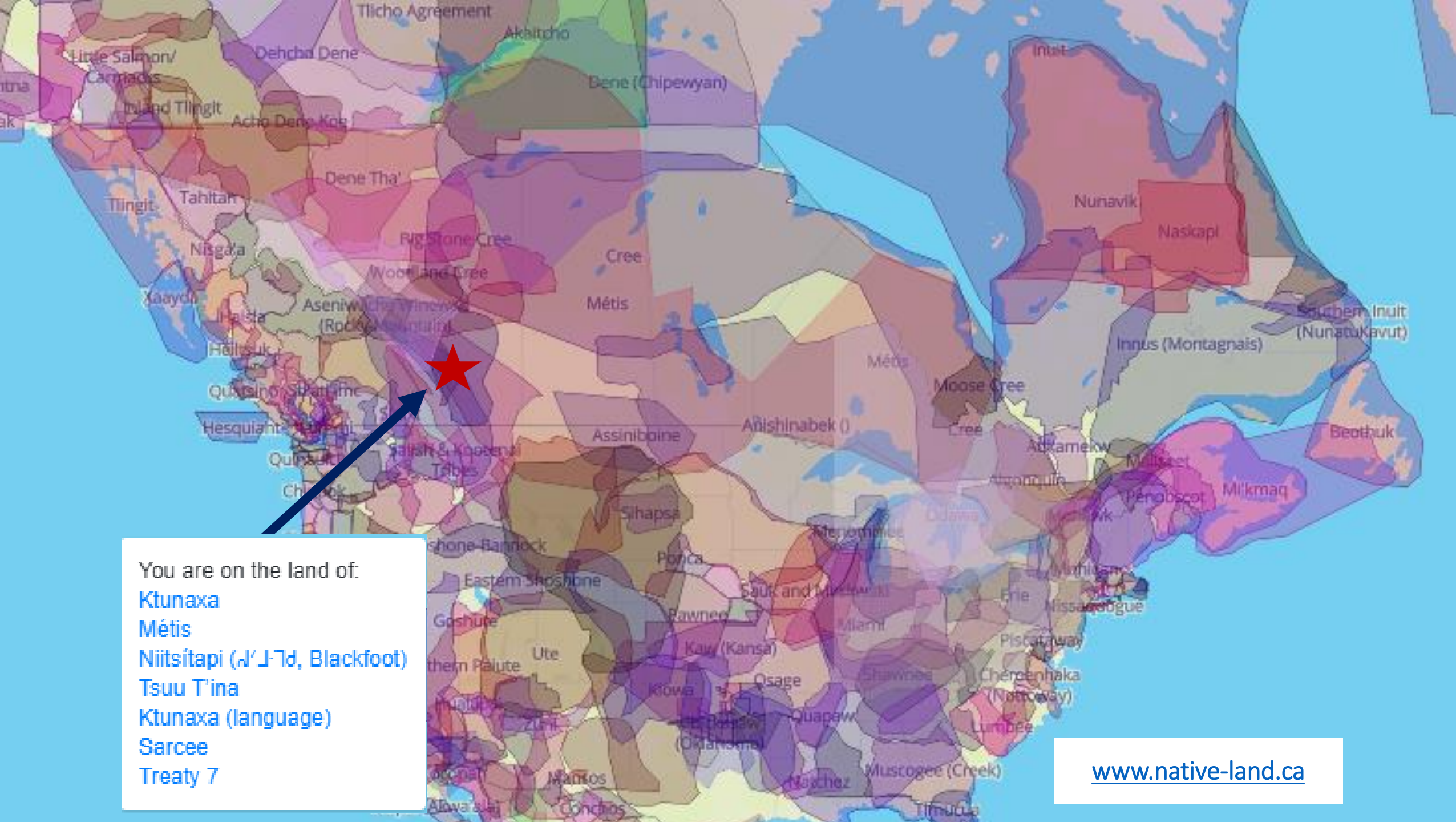
ALBERTA'S EASTERN SLOPES

AND THEIR VALUE BEYOND COAL

PRESENTED BY: CPAWS NORTHERN &
SOUTHERN ALBERTA, Y2Y CONSERVATION INITIATIVE

JUNE 24, 2021



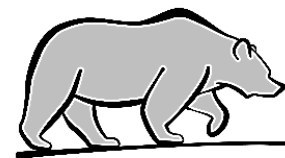


You are on the land of:
Ktunaxa
Métis
Niitsítapi (ᑭᑭᑭᑭ, Blackfoot)
Tsuu T'ina
Ktunaxa (language)
Sarcee
Treaty 7

www.native-land.ca

Y2Y's MISSION

To protect and connect habitat from Yellowstone to Yukon so people and nature can thrive.



Yellowstone to Yukon
Conservation Initiative

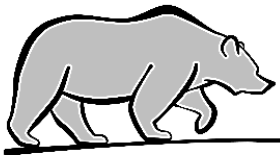
1.3 M
km²

3400
km

Y2Y: ABOUT US

We are the only organization dedicated to securing the long-term ecological health of this 3,400-km-long region.

With a scientific and collaborative approach, we highlight and focus on local issues that have implications for the region, and work with key people to stitch together this landscape.



Yellowstone to Yukon
Conservation Initiative



The Canadian Parks and Wilderness Society

Southern Alberta Chapter, and Northern Alberta Chapter

- Nation-wide, charitable non-profit organization

- Since 1963 has led in achieving the creation of two-thirds of Canada's protected areas

- The only charity in Canada focused solely on protecting public lands and waters





- Two chapters in Alberta started more than 50 years ago, CPAWS Southern Alberta and CPAWS Northern Alberta
- Use science-based evidence to collaborate with government, industry, and Indigenous communities to find conservation solutions on our shared landscape
- Work to conserve and protect wilderness and healthy ecosystems in Northern Alberta





Topics of Discussion

1. Introduction
2. Biodiversity and ecological connectivity
3. Water quality, water quantity, and at-risk trout
4. Cumulative effects and caribou
5. Ecosystem services (nature's benefits to people)
6. Conclusion

Key take-away:

No further coal exploration or development should be permitted on the Eastern Slopes

Why?

- *The inherent value of the Eastern Slopes only exists with the landscape remaining intact;*
- *The headwaters and landscapes of the Eastern Slopes are critical to the future of our province;*
- *The negative impacts of coal mining on the environment, human health, animal health and existing economies outweigh any benefits.*



Biodiversity and Connectivity

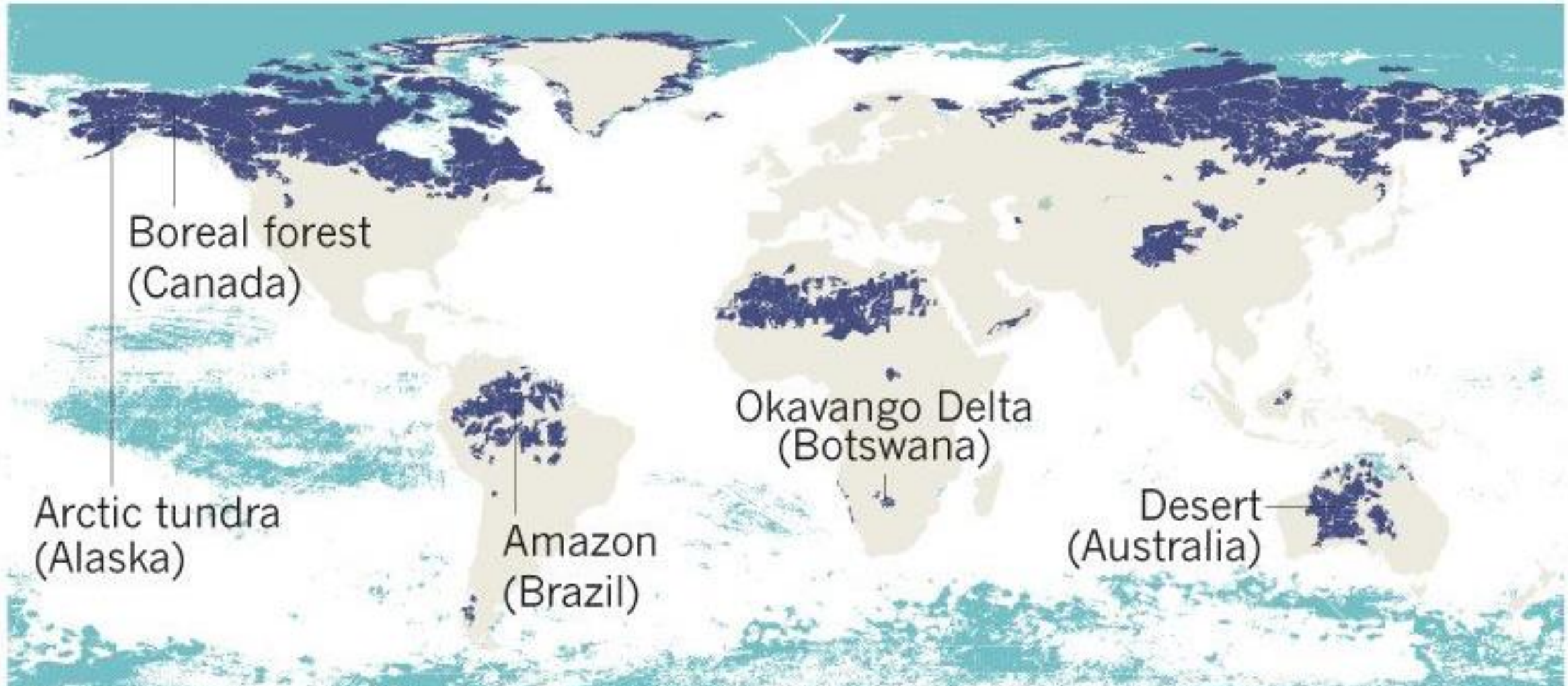
PRESENTED BY: HILARY YOUNG, PhD
SENIOR ALBERTA PROGRAM DIRECTOR
Y2Y CONSERVATION INITIATIVE

JUNE 24TH, 2021



REMAINING WILDERNESS: ■ Terrestrial ■ Marine

Watson et al. 2018 Nature



>77% of land (excluding Antarctica) and **87% of ocean** have been modified by direct effects of human activities



- Nature is declining globally at rates unprecedented in human history
- Around 1 million animal and plant species are now threatened with extinction
- Human well-being is at risk

May 2019



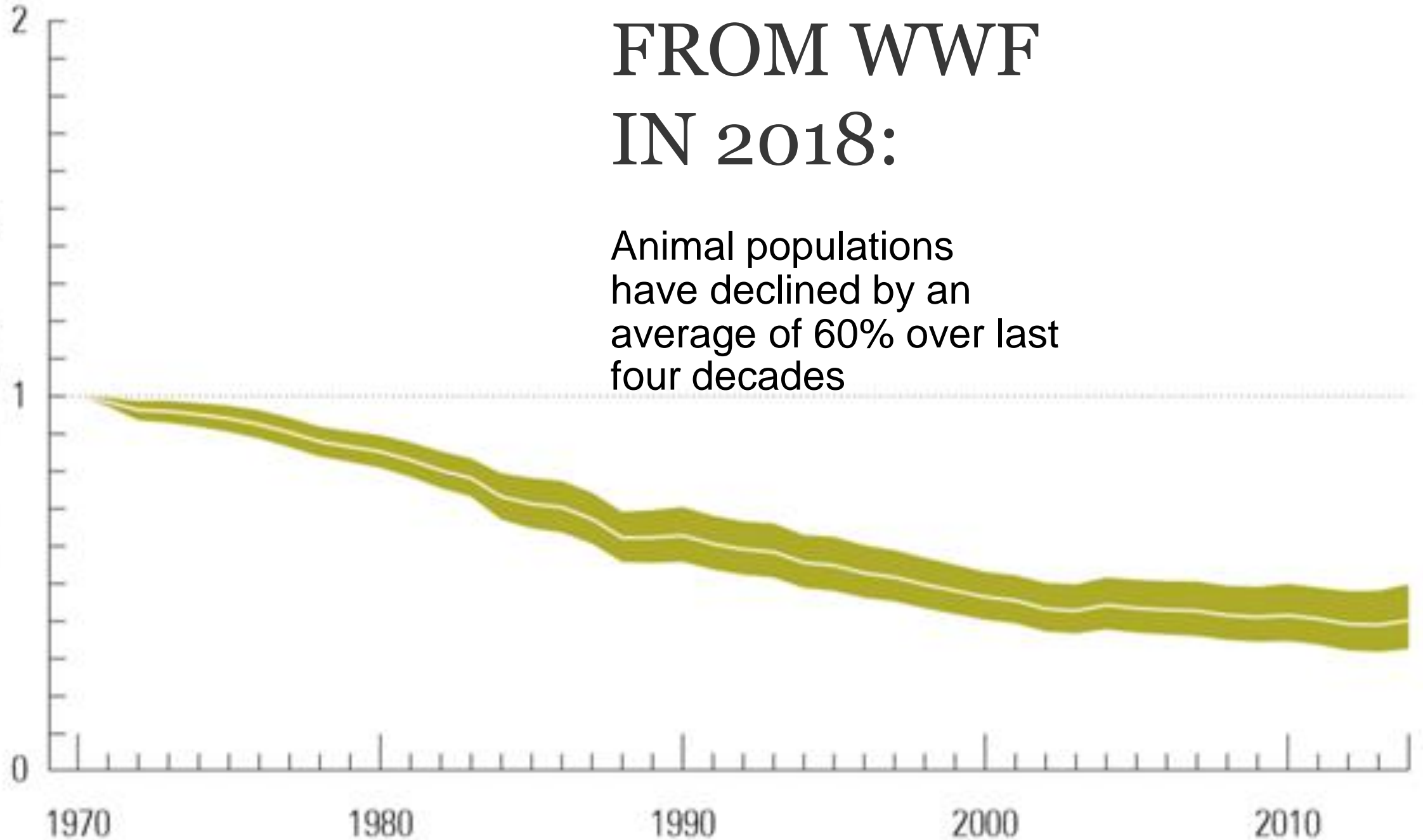
- USD \$24 trillion/ yr = economic value of land-based ecosystem services in the Americas
- BUT two-thirds are in decline

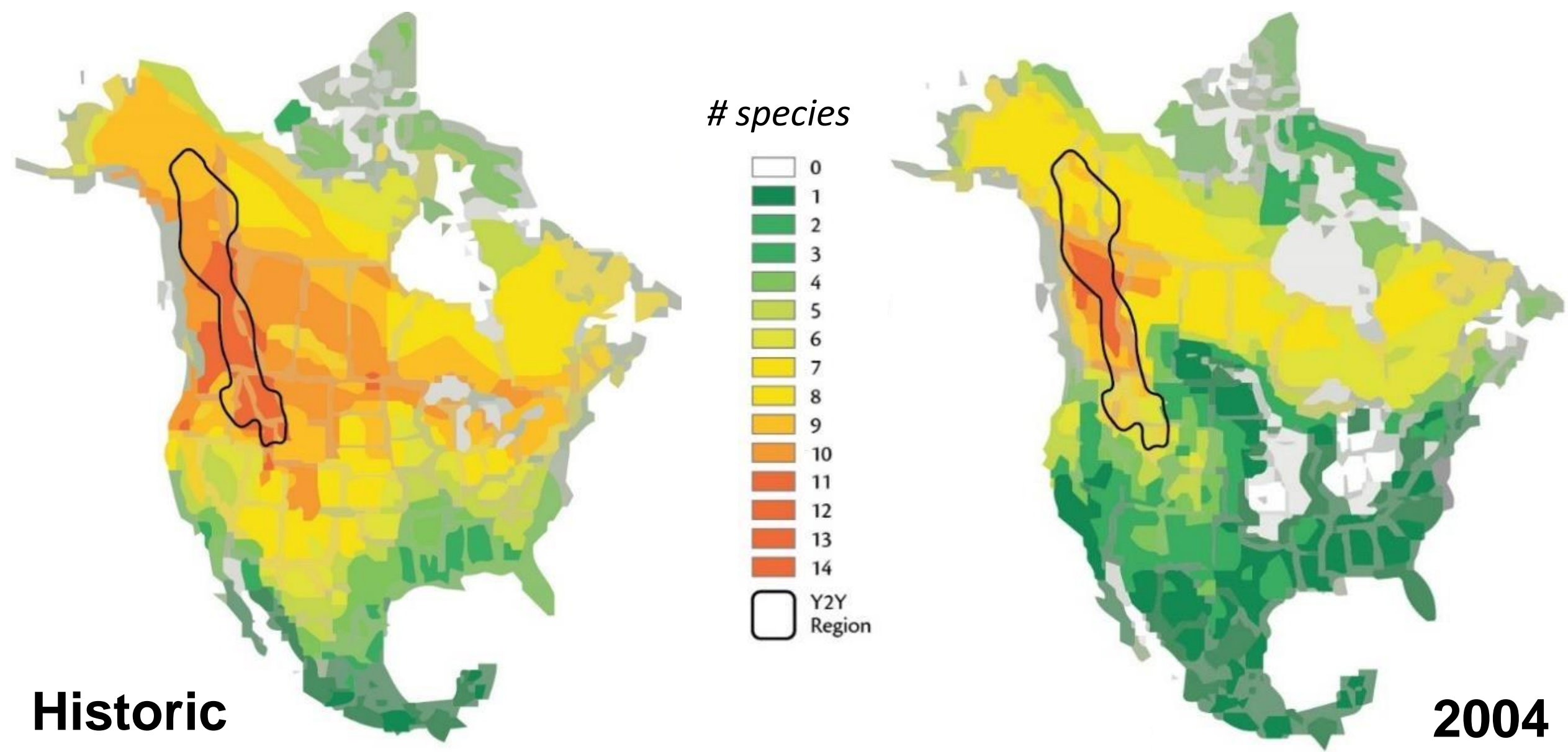
March 2018

FROM WWF IN 2018:

Animal populations
have declined by an
average of 60% over last
four decades

Index value (1970 = 1)





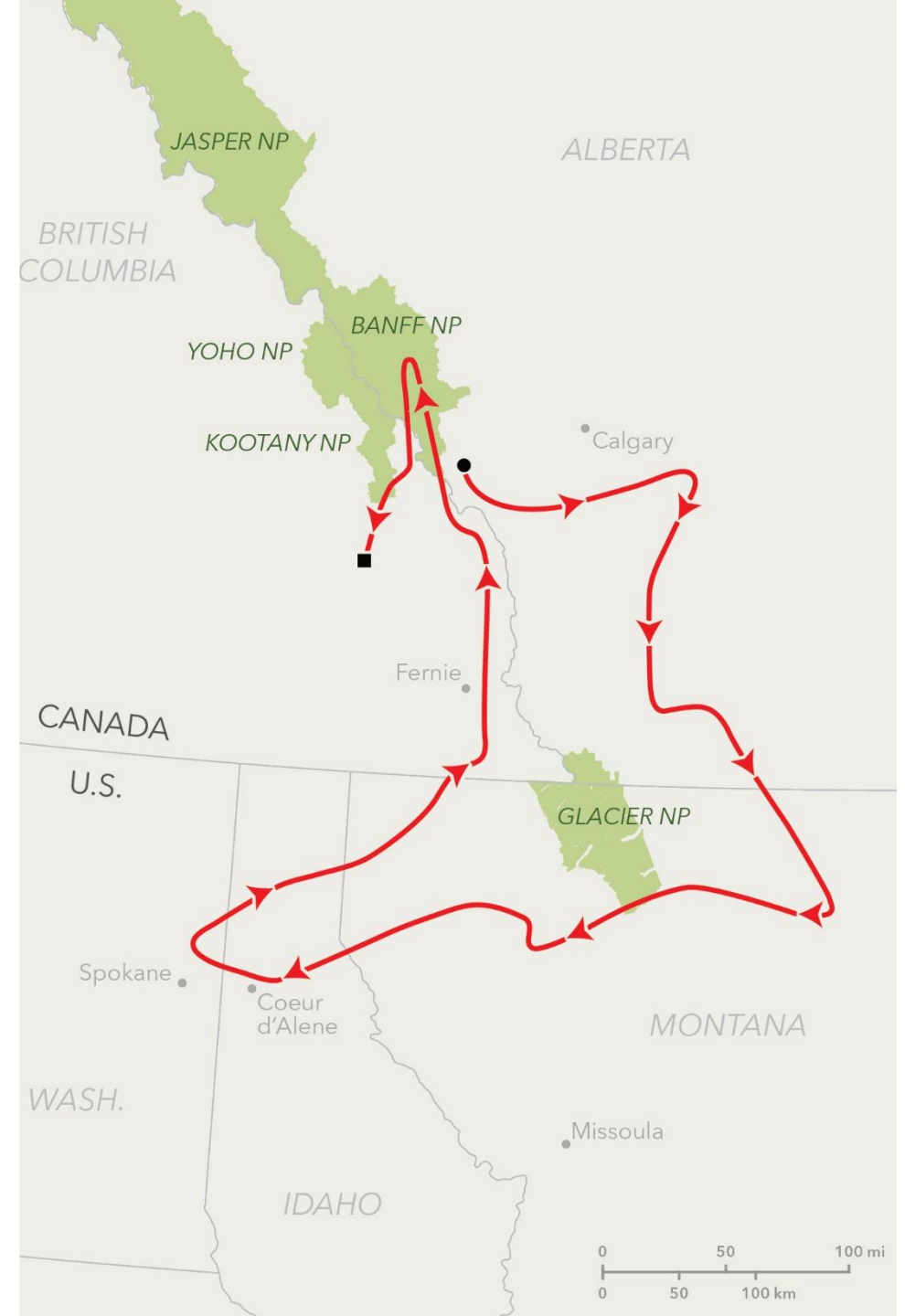
Shrinking ranges of large mammals

What we have in the Rocky Mountains is rare: an almost complete representation of ***all native large mammals*** that roamed the great hills before Europeans arrived.

– Dr. Paul Paquet



In 1991, Pluie the wolf
went for a very long walk
- across 100,000 km²



Why are the
Eastern Slopes
important for
connectivity?

*Four major east-
west connections
across Canadian
Rockies*

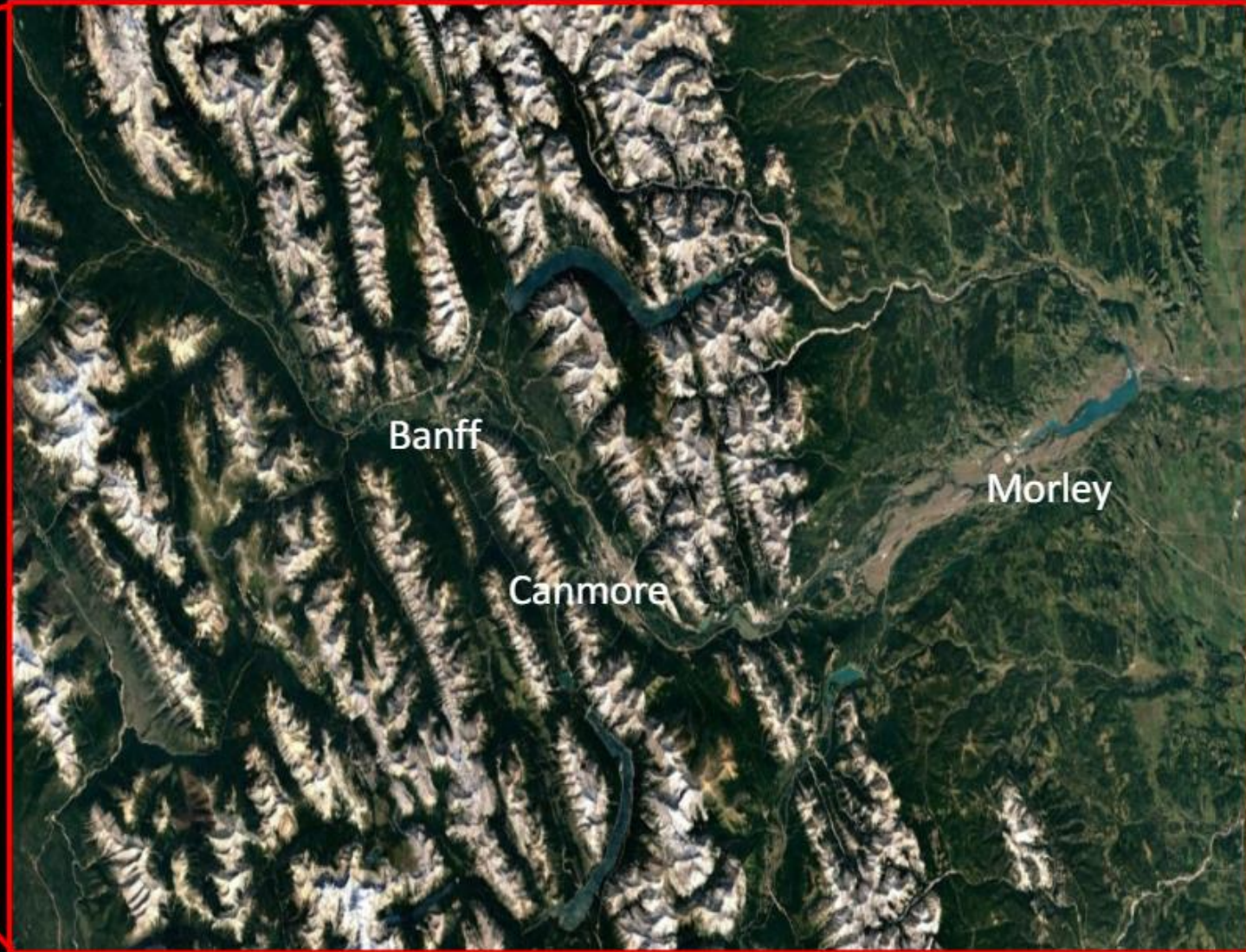
Peace Valley ↑

Athabasca Valley

Bow Valley

Crowsnest Pass

Zooming in on just one valley: the Bow Valley



The Eastern Slopes are highly biodiverse



Coal mining threatens both habitat & connectivity



Grizzly bears

 Grizzly Bear Zone



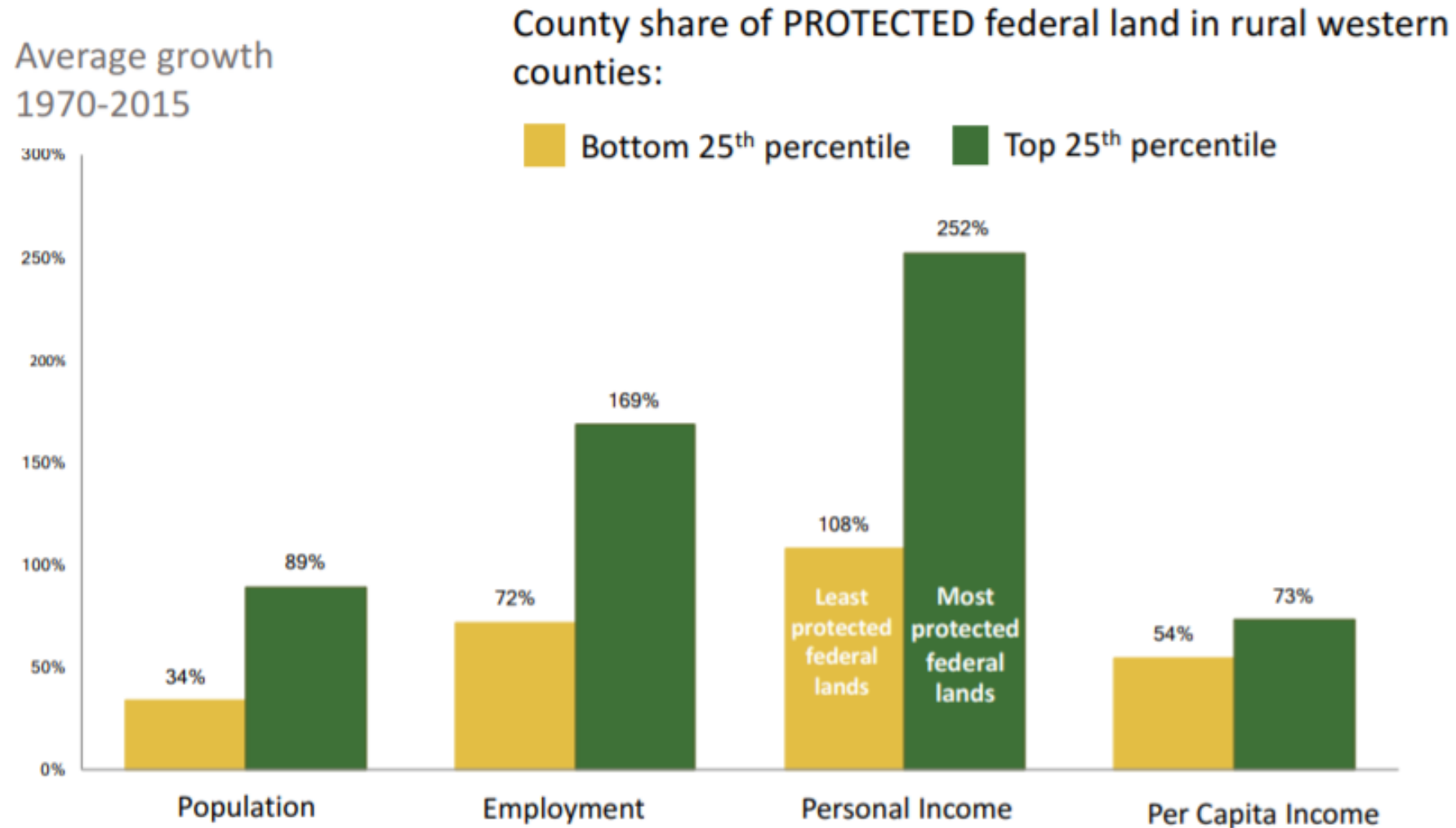
Grizzlies and linear disturbances

- Road densities of over 0.6 km/ km² have a negative impact on grizzly populations

- Industrial roads (forestry, mining, oil) negatively impact habitat use, movements, home range selection, survival, and reproductive rates (Stenhouse et al. 2020)

- Roads in high-quality grizzly habitat have the largest impact

Counties with more protected federal lands grow faster



Pre-1993



After 2018



G7 Environment Ministers May 21, 2021



We commit to champion ambitious and effective global biodiversity targets... **by 2050, biodiversity is valued, conserved, restored and wisely used**, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people....

...recognising that Indigenous Peoples, and local communities, are full partners in the implementation of this target.

We will help set the world on **a nature positive and climate-resilient pathway to bend the curve of biodiversity loss by 2030.**

